

Notes - Transformations - Translations

Translate - slide/move horizontally, vertically, or both

Notation

Point Notation

$$P(x, y) \rightarrow P(x+a, y+b)$$

* Vector Notation

$$\langle a, b \rangle$$

a is the horizontal slide (right, left)
b is the vertical slide (up, down)

Examples

1) Right 3 $P(x, y) \rightarrow P(x+3, y)$ $\langle 3, 0 \rangle$
Point A (7, 6)
 $A' (10, 6)$

2) Down 2 $P(x, y) \rightarrow P(x, y-2)$ $\langle 0, -2 \rangle$
 $A' (7, 4)$

3) Left 7 $P(x, y) \rightarrow P(x-7, y)$ $\langle -7, 0 \rangle$
 $A' (0, 6)$

4) Right 6, Up 4 $P(x, y) \rightarrow P(x+6, y+4)$ $\langle 6, 4 \rangle$
 $A' (13, 10)$

5) Left 3, Down 10 $P(x, y) \rightarrow P(x-3, y-10)$ $\langle -3, -10 \rangle$
 $A' (4, -4)$